ABSTRACT

A CDMA coded, spread spectrum radio signal containing a strong signal and a weak signal is received, and the interference of the strong signal with the weak signal is computed to enhance the ability to track the weak signal. The codes modulating both signals are known, and the weak signal can be predicted. The interference of the strong signal is calculated as the product of the amplitude of the strong signal and the predicted crosscorrelation of the strong signal with the weak signal. The strong signal may be measured, predicted, or acquired through a combination of both methods. The crosscorrelation may be predicted for a range of weak signal values, and the weak signal selected as the prediction producing the greatest received power.

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